DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011605 Address: 333 Burma Road **Date Inspected:** 03-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: CWI Present: Yes No Lv Li Qing **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG COMPONENT

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

Bay #14

This QA Inspector observed the following work in progress:

FCAW in the 3F position for the OBG Segment 11EE at corner Assembly, weld No. CSD6-PP107-103. The welder is identified as #044774. ZPMC QC is identified as Mr. Zhong Guo Hai. The welding variables recorded by QC appear to comply with WPS-B-T-2133.

FCAW in the 2F position for the OBG Segment 11EE at corner Assembly, weld No. CSD6-PP107-087. The welder is identified as #044774. ZPMC QC is identified as Mr. Zhong Guo Hai. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

SAW in the 1G position for the OBG segment 12AE, weld No. SEG-3004AL-007. The welder is identified as #044771. ZPMC QC is identified as Mr. XuTao. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-L2c-S-2.

FCAW in the 2G position for the OBG Corner Assembly, weld No.CA093-003. The welder is identified as #044774. ZPMC QC is identified as Mr. Zhong Guo Hai. The welding variables recorded by QC appear to comply

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with WPS-B-T-2233-Tc-U4b-F.

FCAW in the 2F position for the OBG Corner Assembly, weld No.CSD2-PP108.5-113. The welder is identified as #050242. ZPMC QC is identified as Mr. Zhong Guo Hai. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

Bay #13

This QA Inspector observed the following work in progress:

FCAW in the 2G position for the OBG Segment 11CW, weld No. SSD14A-PP103-257. The welder is identified as #044801. ZPMC QC is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2232-Tc-U4b-F.

FCAW in the 3G position for the OBG Segment 11BW, weld No. SSD12-PP100-254. The welder is identified as #058551. ZPMC QC is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2233-Tc-U5-F.

FCAW in the 3G position for the OBG Segment 11AW, weld No. SEG065-013. The welder is identified as #214945. ZPMC QC is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2233-B-U2-F.

FCAW in the 2G position for the OBG Segment 11BE, weld No. SSD18-PP100-227. The welder is identified as #044779. ZPMC QC is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2232-Tc-U4b-F.

During the Quality Assurance (QA) random in-process visual inspection of Segment 9DW, this QA inspector discovered that ZPMC was observed excavating a weld utilizing the carbon air arc gouge (CAAG) method on a Corner Joint without Preheating. This weld being CAAG was identified as SSD11A-178. This weld is located between Panel Point 80 (PP80) and PP81 on the Cross Beam side. This weld is designated as Seismic Performance Critical Material (SPCM). The weld is a Complete Joint Penetration (CJP) corner joint weld joining the Side Plate (SP672B) to Edge Plate (EP128B). The excavation length was approximately 300mm. No welding procedure specification (WPS) was onsite during the CAAG process. The Y location was measured 1650mm from PP80 along the axis of weld SSD11A-178.

This QA Inspector generated an incident report for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for

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your project.

Inspected By: Bera, Subhasis Quality Assurance Inspector

Reviewed By: Patterson, Rodney QA Reviewer